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THE CASE METHOD IN THE STUDY AND TEACHING OF ETHICS[1]

THE study of ethics often seems to be looked upon as an elegant accomplishment rather than as a necessary preparation for life. Last year, in a large New England college, there were presented to the faculty programmes of study leading to many different professions. In but one of these, the ministry of the church, was ethics looked upon as essential. The study of ethics does not apparently lead any one to pursue a more moral life; and there is a wide difference between teaching a man ethics and teaching him to be ethical. It may be doubted whether anything but the inspiration of a great leadership ever influences men to any kind of righteousness.

I hold that every teaching of ethics should be adapted to make men ethical. Any other advertisement of it is itself most unethical.

There are as many moral standards as there are men united in a common purpose. Any one of these is admirable in some respects. Have they any points in common? And is there such a thing as an objective ethics which could command the adherence of all intelligent and instructed men in the same way that the teachings of the physical sciences to-day are accepted by the same class?

An experience of concrete ethical situations which I may claim to be both wide and deep has given me a respect for the fundamental agreements of different systems. Christian, Buddhistic, Mohammedan, common sense, utilitarian, intuitional ethics, yes, even the no-ethics of Nietzsche, give, if I may venture the paronomasia, a pragmatic sanction to the admonitions of our spiritual and secular pastors and masters, which is striking; and I have come to think that the principles of morality must be of a certain robustness to withstand the interpretations put upon them by men of such varied temper, training, and tradition.

I believe that all who study the subject agree with me that there are these fundamental likenesses. The natural inference would be that there is *an ethics* which could be generalized from them, giving us a rule of conduct binding, not from without, but in the very na-

[1] Read at the meeting of the American Philosophical Association, December, 1912.

ture of conduct itself. To find such a rule one must pursue the path of the physical sciences without more ado, leaving all metaphysical questions regarding the ground of moral obligation aside, to be settled, if at all, in their proper place.

It must not be assumed at the start that we know what right conduct is. There must be an unprejudiced search with no arrière pensée.

Meditation upon this has led me to consider the possibility and advisability of employing in the study of ethics the case method or system, now in use in the Harvard and other important law schools. I propose, therefore, to put and try to answer four questions, after which I shall endeavor to present the results of a two years' trial of the method at Dartmouth College, the only place, so far as I know, where it has been employed in ethics. If I am wrong in this, I shall be glad to be corrected, and I would rejoice to know that others had tried it, that I might profit by their experience.[2]

I. What is the case method in law?
II. Why adopt it for ethics?
III. What is its value for the study of ethics?
IV. What is its value for the teaching of ethics?

I

The case method, as applied to the teaching of law, I find attacked in an article by Dr. J. P. Bishop.[3] He says of the authorities of the Harvard Law School, "They have swept the whole line of textbooks away;" but he acknowledges that "the use of decided cases in elementary instruction has always been common and [he believes] universal."

President Eliot, upon being introduced to explain the formal adoption of the method, said:[4] "He [Professor Langdell] told me that law was a science: I was quite prepared to believe it. He told me that the way to study a science was to go to the original sources. I knew that was true, for I had been brought up in the science of chemistry myself; and one of the first rules of a conscientious student of science is never to take a fact or a principle out of second-hand treatises, but to go to the original memoir of the discoverer of that fact or principle. Out of these two fundamental propositions—that law is a science, and that a science is to be studied in its sources—there gradually grew, first, a new method of teaching law; and, secondly, a reconstruction of the curriculum of the school."

[2] My attention has been called to the work of Professor Frank Chapman Sharp, of the University of Wisconsin, "The Influence of Custom on the Moral Judgment." Madison, Wis., 1908. As I shall show later in connection with a mention of casuistry, Professor Sharp's method bears no resemblance to mine.

[3] *American Law Review*, 1888.

[4] *American Law Review*, Vol. XXII., page 18.

Professor J. C. Gray, writing later in the same *Review*[5] (in reply to Dr. Bishop's attacks), says that "no system will work of itself" and that law treatises may be necessary, though not for teaching. "The best material for a legal education would be real cases." Cases, not text-books, are the basis of instruction, supplemented, of course, by lectures. "The method of study by cases is the best form of legal education that has yet been discovered. It is the best because it is most in accordance with the constitution of the human mind; because the only way to learn to do a thing is to do it. No man ever yet learned to dance or to swim by reading treatises upon saltation or natation. No man ever learned chemistry except by retort and crucible. No man ever learned mathematics without paper and pencil."

It should be added that the cases cited are always actual cases, highly condensed, but with all essentials given, including the reasons for the judicial decision. Many case books have been published, and more are constantly being prepared.

II

Why adopt this system for ethics? Well, in part, because other methods seem to me to be ineffective, but chiefly because I am convinced that ethics, too, is a science and must be studied in its sources, viz.: *actual human conduct with the judgments passed upon it by the authorities of whatever group the agent belonged to, for the purpose of the judgment.* In this way we may possibly arrive at an objective ethics whose authority over all men would be equal and imperative. There is a respect paid by all intelligent and instructed adults to the laws of the physical sciences far beyond that ever paid by any but the most conscientious to the pronouncements of any ethical code. If there should be found, upon investigation, laws as absolute for man's successful continuance in society as there are now for his successful resistance to the forces of nature, exhortation of every sort would give place to instruction. The ideal of Socrates would have been attained. Plato's ironical remark that horse-breeding must be taught, but that statecraft "comes by nature," would no longer be pertinent. Definite laws and principles of behavior would have the approval of men of all schools. There would be no Catholic, Protestant, Buddhist ethics any more than there is now a Catholic, Protestant, or Buddhist chemistry, physics, or economics.

And the great value of the experimental method is that it never fails. The hypothesis which led to the making of the experiment may prove inadequate or incorrect: but that is a matter of indifference. One learns as much from such a failure as from success. These are what Bacon called *experimenta lucifera.*

[5] *Ibid.*, pages 756 ff.

Now, what if it should appear, after wide experimentation by many observers, that there is no universal basis for ethical teaching? The result, for all except the morally feeble-minded, would still be valuable. There might be, indeed, for a time, a condition of things comparable to that of Greece under the Sophists. Men might reject laws imposed by external authority on the ground that they are conventional, not natural. Indeed that seems to me to be increasingly the temper of the men of this day. Old standards have lost their value, not only for the flippant multitude, but also for many who are far from flippant.

After the Sophists came Socrates, reducing the chaotic interpretations of life to a rule. The *concept* in its practical working convinced those who knew it that there was some objective order in worlds mental and moral. But, let us suppose for the sake of the argument that no Socratic concept for morals may now be found. Would it not be better for us to know this than to languish in ignorance? There is a state of mind which I am wont to call the *ignorance of bliss.* Surely no philosopher desires it. As Professor Perry has said, "No man wants to be even a *blessed* fool!"

If there be an objective morality which no intelligent man can disregard, its value will be incalculable. We shall know *what* to teach at least. If there be no such objective morality, then it will be wise for men to choose their standards according to temperament and tradition. They will know frankly where they stand, where other men stand, and what may be done in the premises.

Such a conclusion can be reached, one way or the other, only through a scientific study of actual human conduct. It can never be reached through a theoretic ethics based upon a metaphysical system. But let me say now that I do not propose the case method as the only way of teaching ethics. It must be supplemented later in a course by theory; for there are certain questions which can not be met at all by the case method.[6] Note that the case method is not casuistry; for casuistry always presupposes an established moral law. The application of the law to the particular case is sought, but there is never a doubt about the law.[7] The case method seeks to know what the law

[6] It is unjust and undiscriminating to condemn it on the ground that there is no recognition given to the non-empirical character of the moral imperative. Professor Patten's strictures upon the method, when he discussed it at the meeting of the American Philosophical Association, in December last, were based upon an entire misconception of its claims. Professor Patten discussed rather what he knew to be my own deductions from this study than the contents of this paper or the value of the case method.

[7] Professor Patten seems to me simply to have denied this assertion. I invite him to bring proof that it is not so. In this connection, too, I must notice the very interesting and valuable modern casuistry of Professor Sharp in the work

is: and nothing is presupposed unless it be that the cases considered are known in common speech to come under the general heading, moral.

One must frankly face a very great difficulty in the practical employment of this method in teaching ethics. Law students have great masses of cases carefully arranged and coordinated, *each one properly adjudicated, and that unmistakably.* There are few such cases for ethics except when we take law cases over bodily—a thing which I very often do. One of the immediate and imperative needs, if the method is to be more than a local experiment, is an association of those interested in studying, teaching, and practising ethics to prepare, criticize, and publish cases properly arranged and coordinated for the use of classes. No one man is competent to do this. It requires many minds and much time in order that the whole field may adequately be covered.

III

What is the value of this method as applied to the study of ethics? Some will say, This is not ethics at all—it is sociology. Ethics is a normative science. It has to do with what ought to be, and can never be illumined by the study of what is. I challenge this traditional and conventional point of view. Governor S. E. Baldwin, I think, commenting upon the case method in law, scornfully compares the study of cases to the study of multitudes of apples in order to arrive at the law of gravitation. His criticism is more witty than pertinent. The observation of falling bodies under many different conditions by many observers may well lead to enlightenment upon the law of gravitation.

It is just a wide patient observation which has made that law a synonym for all that is valid and permanent in our knowledge. Where is such solidity, permanence, or agreement in ethical law? Honesty, truthfulness, temperance, honor, integrity, magnanimity, and the rest, change their minds when they cross the sea into alien territory.

One of the most notable and valuable books upon ethics of recent

before mentioned and in other writings, which has been thought by some to be a prior discussion of this method: but a very slight review of these writings will convince any one that our methods have nothing in common except the inductive principle. His book is based upon replies received to a *questionnaire* addressed to some hundreds of students at Wisconsin. The questions are all casuistical. He seeks to know the ground of individual judgments of moral conduct and to discover if possible the sources of such judgments. I seek to know *what has happened:* and to discover, if possible, a law running through the judgments *which society has made through its duly appointed officials.* I do not, in any case, study opinions, but seek the established facts.

years is the text-book of Dewey and Tufts. Not the least valuable part is Part I., wherein are brought together the various standards of many peoples and religions for purposes of comparison. I do not criticize that admirable book when I say that we need to have a mass of cases drawn from the original sources for each of the groups, clans, nations, religions. The interesting and valuable books of Spencer, Westermarck, Tylor, McLennan, Lang, Spencer and Gillen, Hobhouse, Sutherland, and many others, contain material which is corroborative of many theories; but this material is not in the form needed by us. One of the most valuable of authors for this study is Sir Henry Maine, who presents fully the customs and judgments of society in some of its most primtive forms.

The study of cases brings us into direct and vivid contact with reality. We meet men in concrete situations being judged favorably or unfavorably *by the authorities of the group to which they belong;* and we realize pragmatically the exact value of conduct. Its value is no longer of the closet, theoretic, but demonstrated. That there is need in the study of cases for some heuristic is apparent—otherwise we should be lost in the contemplation of things and never find the Divine Idea. That heuristic, however, should never be the particular ethical theory in which the investigator has been chiefly trained; though it is unavoidable that this theory should color his conclusions somewhat. It should be determined by the nature of the problem considered; and we can have no better example to follow than Socrates in his search for the concept.

I have called the course at Dartmouth *cases of conduct*—a phrase suggested to me by Professor G. H. Palmer when he was told the nature of the proposed experiment. It is not—emphatically—*cases of conscience,* and all material should be historical. For this reason cases taken from fiction are not considered. They represent some one man's ideal. Historical cases, properly attested, alone give us the means of objective judgment.

The abundance of material is bewildering, and the outlook for the attainment of order apparently hopeless—but sociology, economics, psychology, and history have had similar difficulties to grapple with and their success is encouraging. I believe that if a small number of earnest investigators shall initiate this method of study, they will find valuable material, not only in the publications of anthropologists, but, also, and most significantly, in the investigations of contemporary sociologists, enlightened prison officials, social workers, and others. The field is ripe for the harvest.

Whether this method may prove more advantageous for the study than for the teaching of ethics, I am not sure. The time of my

experiment—two years—is very short; and the small number in classes—an average of nine members—leaves results as to teaching uncertain; but I feel confident that in the *study* of ethics, at least, this method will be found fruitful.

IV

What is its value for teaching? First, its concreteness. Theory is strictly relegated to a later part of the course and men are shown the actual penalties inflicted for transgression of group standards, customary morality. Of necessity we can consider penalties only; for there are no courts for the awarding of rewards for action, if we except the Nobel Prize Committee and the Carnegie Hero Committee, which cover a very restricted field.

Secondly, the opportunity to use the Socratic midwifery. In considering a case of murder, theft, arson, adultery, or other, the student gives testimony himself as to the unmistakable judgment of society—not his own opinion or the *opinion* of a judge, but the imposition of a penalty which has been enforced. There is not even a question whether it *should* be enforced. It has been—*voilà tout!*

But I am far from saying that there are no obstacles in the way of its successful use in teaching. Some of them are here given.

1. The unfamiliarity of the young with ethical situations.
2. The extreme conservatism and conventionality of the young.
3. Their inexpertness in abstraction and generalization.
4. The lack of a case book.
5. The apparently discursive character of the course, which often makes the student lose the thread of the discussion.
6. The amount of time needed is greatly in excess of that needed for dogmatic instruction.

Most students, I find, prefer to be taught by the lazy and inefficient lecture method, and as a part of good teaching must always be to lead the student *to think it good,* some concession must be made to their prejudices. It may easily be that the truest method of teaching—and I hold that this is the Socratic—will be, for a time at least, unpopular. In such case one must choose between being thought a good teacher and being one in reality.

The chief value of the case method as *an introduction* to ethical study—and this is all that I claim for it—is that students may and do become deeply interested in, not personal morals only, but also and more significantly, in large social movements and questions of public policy.

A few words about the exact method used in the class-room.

Some preliminary discussion of the aims and methods of the

course is followed by (*a*) dogmatic instruction in the nature of scientific method; (*b*) by study of the text of Dewey and Tufts on "Early Group Morality"; (*c*) by a direct study of several primitive cases of group morality in the first chapter of Dewey and Tufts; (*d*) by a careful consideration of the four methods of judging conduct in Spencer's "Principles of Ethics," the student being required to present a written digest of each of these chapters which are also discussed in class.

After this much preparation an attempt is made to *educe* from the class a provisional classification of all possible forms of conduct which meet with social judgment. It was found that all cases could be considered under four heads. Cases relating to:

I. The preservation of life and limb.
II. The preservation of property.
III. The preservation of security in the first two.
IV. The preservation of liberty, bodily and mental, culminating in the preservation of the power to hold and express individual opinion.

While this classification was avowedly tentative and subject to change, it was interestingly confirmed by my colleague, Professor W. H. Lyon, of the Tuck School, Dartmouth College, and a member of the New York bar. He said that the first two classes covered commercial and criminal procedure at law and the last two taken together would correspond roughly to actions in tort. The statement of this fact to the class by Professor Lyon made a visible impression.

At this point the class was invited to discover and bring to the class-room cases under the four divisions taken in order. These were then analyzed according to a formula again educed from the class by suggestion on my part, though no undue pressure was brought to bear.

This is the formula:

In order properly to use any case it is necessary

(*a*) To have it stated in all its essential characteristics and in these alone—following the analogy of law cases.

(*b*) One must decide which aspect of the case is to be considered, that of the agent or that of society reacting upon his act.

(*c*) If one shall choose to consider the aspect of social retribution (positive or negative) one must carefully distinguish the object sought to be attained. Sub-headings for this division are

1. Punishment (as a general answer).
2. Example.
3. Prevention of further transgression.
4. Reform of the offender.

5. Restitution to the injured.

6. Revenge (vengeance, "getting even," atonement).

(*d*) Whether the object sought was actually attained.

(*e*) Whether the action of society was the cause or only a cause or perhaps not a cause at all, of the resulting change in conduct.

This analysis, while in principle the same, varies in form with different types of cases.[8]

Hundreds of cases, some trivial, some important, were brought in by students and treated objectively. The word *ought* is rigorously excluded. One seeks simply to find out the *results* of the action; and I have applied the term the physics of ethics or ethical physics to our procedure. This seems to me equally characteristic of the text-book used in the second semester, Perry's "Moral Economy." Most of the cases considered were taken from contemporary life. They included all kinds of *killing* from accidental killing to deliberate murder and an effort was made to grade all killings according to the severity of the judgments made upon them. Killing of enemies in war, killing in self-defense, in defense of women and children attacked, etc., was contrasted with killing for revenge, avarice, brutality, and the like. The killing brought about by carelessness in the use of machinery, neglect of sanitary precautions, recklessness in running railroads, etc., where many lives are lost and much suffering is incident, yet little or no punishment is inflicted, was contrasted with cases of manslaughter where a relatively severe penalty is inflicted, to bring out the principles, tentatively assumed, that

1. The group punishes severely anything which threatens group continuance.

2. It is indifferent to killing where such does not appear to endanger the *idea of society,* as in railroad accident cases.

3. Lack of attention and old custom alone are responsible for society's neglect of things more directly subversive of its principle than some which are severely reprobated.

Ideally, for such a study, the judgments of society in all stages should be collated. It is manifestly impossible to do this in the classroom. It is the work of future advanced students and teachers to bring together as many varieties as possible of each of these classes relating to life, property, security, and liberty that material may not be wanting for a sound induction. Meantime, sufficient cases were produced by the class to make a very impressive exhibit. I pro-

[8] Mill's methods of proof should, theoretically, be used. It can not be done with a class perhaps quite untrained in logic. The most one can do is to guide the class in the spirit of these rules.

pose next year to prepare the cases myself, not to depend upon the students, who are sometimes very blind to excellent cases.

Let me insist that this study of cases, however vague it may seem to some from this brief and necesarily imperfect presentation, is always an objective study of what has happened, not in the least of what ought to happen or of individual opinions. It is essentially a legal study. If objection be made that it ought not to be called ethics, I must insist that we need first to find out what is being done before we can with any confidence say what ought to be done; and that which is done will probably enlighten us very much regarding possibilities.

A social group *qua* group will always act in certain specific ways regardless of moral imperatives, so called, regardless of exhortation to mercy. If the group is to survive, treason in any form, when known, must be visited with death, at least during times of stress. It has been so visited.

Cases under the other three great categories, property, security, liberty, culminating in liberty of opinion and speech, must all be taken to be but shadings away from cases of life. In the end all ethics is a question of survival of personality, linked to the survival of the body. All that a man hath will he give for his life, but that life may mean the death of the body. The apex of my pyramid I have called *liberty of propaganda*, for if a man may not express *himself*, he might as well be dead!

In conclusion, I give brief indications of the tentative results derived from this study. They invite and welcome the frankest—but, I hope, understanding—criticism.

The locus of all moral situations is the conflict of interests.

Ultimate decisions rest with the individual.

There is no morality where there is coercion.

The individual may do as he will so long as he does not deny his own nature and purpose in life.

Individuality is the goal of social progress, the satisfaction of all interests, hence, development of *all* personalities, the only ultimate, but this is hardly probable in an evolving society.

The place of *intention* is clearly defined in social practise, but conflicting interests often bring about the punishment of unintentional offenders.

No universal law has been found except that each organism or organization applauds its upholder and condemns its threatener. TREASON IS NEVER FORGIVEN IF KNOWN TO EXIST.

The only *ought* is the intelligent recognition of the place of all interests and consequent prudent adaptation to them.

Men get their moral impulsive power through loyalty to some group, however small or large. Intelligence alone is not sufficient to make men moral.

This is the merest sketch of a method which has been interesting and fruitful to me individually. Should there be shown sufficient interest in it, I hope to elaborate later on. This is submitted in real humility as an effort toward solving a difficult problem, and criticism is eagerly awaited.

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THEORY OF INDEPENDENCE

AMONG the several elements constituting the philosophical theory now known and vigorously defended as the new realism, the doctrine of independence occupies a central place. The authors of the recent publication bearing the title of this modern school[1] have not failed to realize this, and Professor Perry, of Harvard University, devotes his contribution in the "cooperative" effort to a thorough discussion of the object's independence of consciousness. Stated in its simplest terms, the theory of independence is the view that a real object does not owe its existence or its qualities to the fact of its being cognized. To this is added the belief that the real object is nevertheless such as may be known. In fact all the physical objects of experience are real objects and they are capable of being cognized *in toto*. There is no residuum which is from its nature unknowable. It is clear that such a view commits us to a definite type of viewing consciousness on the one hand and reality on the other. In opposition to Berkeley it is claimed that no object is real if it can be shown that its existence is identical with its being perceived. In opposition to Locke and to Kant it is just as stoutly maintained that it is foolish to look for, or to believe in, without looking for it, some thing at the basis of the qualities perceived, which itself can never be an object of perception. The identical thing which is at one moment an object of perception is at the next moment, if I shut my eyes and cease thinking of it, an object unperceived, but none the less (and equally none the more) a real object. As far as the object and its reality is concerned, my perceiving it or your perceiving it is not merely an unimportant accident; it is even less than that. It does not affect the nature of the object in the least. The object passes in and out of consciousness unscathed.

[1] "The New Realism: Cooperative Studies in Philosophy." New York: Macmillan, 1912.

What, then, is consciousness? It may be an activity, it may be a receptacle, it may be a relation. Its activity may be selective or organizing. But whichever of these it be, it is purely external to the object, and in no sense constitutive of any element therein.

Is there any way in which we can show that this account of the object and its relation to consciousness is true? Clearly the only direct way would be to get hold of a real object when not in any consciousness and see what it looks like. And it is just as clear that this can never be done. To "get hold" of an object is to spoil its purity, and it becomes useless. And so long as we do not "get hold" of it there is no object to examine and we are baffled. This is what Perry calls the "ego-centric predicament."

Stated in these bald terms we have merely a predicament which proves nothing, as Perry rightly concludes, except that it gives us a gentle hint to look around for other ways, even if less direct, of solving the problem. But, after all, it seems to me that the "predicament" has some other connotation besides. Why is it, we may ask, to take a specific case, that I can not have a green color unless I see it? For it is not merely true in general that I must attend to an object if it is to be an object for me. I can not have a green color unless I attend to it in a specific manner; I must look at it. And if I try ever so hard to make clear to myself what green is, I have no way of doing it except by saying that it is the kind of thing I see when I see green. Is this impossibility of explaining green to a blind man simply an accident, without essential connection with the *nature* of green? Does it not rather lead us to think that the very essence of green is that it is seen? And does not this circumstance color the ego-centric predicament in a way that is extremely significant? It seems to suggest that the predicament in question is not an accident, but is conditioned by the *nature* of things. If what was said of color may be generalized in its application, then there may be some warrant in saying that it is because it is the essential nature of objects as such to be in consciousness that we find ourselves unable to attach any meaning to an object out of consciousness, and hence the two varieties of Idealism, the one believing in an unknowable *Ding an sich*, to escape utter subjectivism; the other refusing to admit what can in no case make any practical difference, and hence, identifying the object as experienced with the real object, and claiming that an object must be experienced or it is nothing.

However, the argument from the ego-centric predicament for realism is purely negative. It is intended in the use Perry makes of it to invalidate it as an argument for idealism. It can not, of course, prove realism or even create a presumption in its favor. If I am not

a competent judge of the nature of objects in themselves because I am always in my own light when I wish to deal with them, I must give up the problem, and so must every conceivable investigator, be he man or God, do the same. For whoever the subject be, he can not at the same time eat the cake and have it too. He can not at the same time perceive his object and not perceive it. The predicament is universal.

But is there not an indirect method of attacking the same problem of the relation of object to consciousness? Is it possible by analyzing the various modes of dependence as visible in nature to determine whether the relation of object and consciousness is identical with any of them? If it is, then our problem is solved in favor of dependence, of course, and against the realist contention. But suppose the relation in question is not identical with any of the modes of dependence of one thing upon another as revealed in scientific analysis—what then? Have we a right to conclude that objects are not dependent on consciousness? Who is to warrant that the modes of dependence as observable among objects exhausts the possible kinds of dependence, and what right have we to infer from one kind of relation one totally different? The assumption that objects in their interdependence can throw light on our problem is a begging of the question. If the relation of object to consciousness, which is admittedly baffling, must find its counterpart in the relations among objects themselves, it is not the unique relation which the ego-centric predicament shows it to be.

Let us take an instance of an analogous predicament in a different sphere. A given individual is operated on for appendicitis and dies as a result of the operation. The surgeon maintains that the patient would have died in any case, and that the operation was a safe risk, for it might have saved him. The relatives of the patient may entertain a legitimate doubt and speculate on what might have been if their father or brother had not submitted to an operation. His case was not exactly like the others in the surgeon's experience. Every case is, after all, unique, and what does the surgeon know of the many cases of appendicitis that were operated on and either survived or succumbed—as to whether they would have survived without an operation? Clearly there is nothing but probability, and the only direct experiment, namely, to see whether the person who died under the knife can live without an operation, is made impossible from the nature of the case. Here we have a predicament, and clearly there is no way out of it. No amount of experimentation on any number of patients can prove anything for the individual in question, so long as we maintain that an individual as such has something unique about him, no matter how similar he may be in special aspects to

other individuals of the same species. Besides, every case constitutes a one-sided experiment only, whether it is a case of an operation performed or of one who refused to submit to the surgeon's knife. It is possible, of course, to take a hundred cases, say, of operation, and, comparing them with an equal number of cases of those who refused to submit to an operation, to see the relative percentage of survivals of the disease. This would prove of value on the assumption of uniformity of the disease if we take a large number of cases. Or it is possible by an actual examination of the progress of the disease in a given case to make up one's mind with a high degree of probability as to the condition of the diseased organ and its probable development. But all this is possible because we are dealing here with an individual of a class, and legitimate comparison is in order. Whereas in the problem under discussion it is quite illegitimate to assume that there is a similarity between the relation of an object to consciousness and the various relations among objects themselves. To be sure, the contrary assumption that the conscious relation is unique might be just as gratuitous, and the matter must be solved, if at all, empirically. But so long as we do not know what the nature of the conscious relation is, how can analysis of other relations ever make us wise on the matter? Assuming even that among the relations of objects among themselves there is one in which the dependence or absence of dependence is like that of object on consciousness, we should never know it.

From the aforegoing considerations, if they are not altogether beside the mark, it would seem that an attempt to analyze the various modes of dependence in nature as a basis for solving our problem was foredoomed to failure. But we are not left to *a priori* considerations. An attempt has actually been made to solve the problem in this way. Professor Perry enumerates nine classes of dependence as follows: (1) Relation, (2) Whole-part, (3) Part-whole, (4) Thing-attribute, (5) Attribute-thing, (6) Causation, (7) Reciprocity, (8) Implying, (9) Being implied. He describes each class, and adds that while they may not be logically ultimate or coordinate, they are at least intelligible, and so far as our main problem is concerned, complete. Note that in enumerating the kinds of dependence we actually find whose nature is clear to us, we are naturally precluded from counting the consciousness-object relation as one of them, because that is the question to be decided. In calling our enumeration complete we can therefore mean only that, the conscious relation deliberately set aside for the moment, the enumeration is complete, but not otherwise. And, as a matter of fact, abstracting from our ignorance of the matter, the enumeration is complete if the conscious relation is identical with one of the nine in the list, or if not being identical with any

of them it is not a relation of dependence. There is yet a third possibility, namely, that it is not identical with any of the nine laid down by Perry and is yet a relation of dependence of a new kind. In this case Professor Perry's list is incomplete. But Professor Perry, it seems to me, absolutely ignores this last possibility, and does not do full justice to the first. For be it noted, if it is true that the conscious relation is identical with any one of the nine in the list, the latter is complete, to be sure, but the conscious relation is then one of dependence and not of independence. To show that my criticism is justified let us follow Professor Perry further in his argument.

To prove independence, he says, it is sufficient to show that a given relation of two terms does not show dependence, for independence simply means non-dependence. So far so good. But when he adds that independence signifies "the total absence of dependence in the senses enumerated above," we are forced to reply, We have no objection to your defining independence as you see fit, but pray bear in mind that if such is your definition of independence, it means *independence as between objects.* What independence (or dependence for that matter) in the consciousness-object relation may mean, is still an open question.

To proceed. Having explained what dependence and independence are, Professor Perry next lays down a number of propositions concerning the kind of entities that are or are not dependent on each other. Among them is the theorem that "All simple entities are mutually independent." This is proved by showing that simple entities can not be dependent in the whole-part sense, nor causally, nor in the sense of implying or being implied. In a similar way it is shown that "simple entities are independent of the complexes of which they are members." In view of the considerations we have adduced, this can only mean that simple entities as objects, or a simple entity and a complex, both of which are objects, can not be dependent in the manner in which one object may be dependent on another, and hence are independent.

The last step in Perry's argument is to apply the general propositions just mentioned to the consciousness-object relation. "Simple entities," he says, "are not dependent on consciousness, because, as we have seen, there is no sense in which simple entities can be said to be dependent at all." Have we really seen this? The reader who has followed me thus far will, I trust, agree with me when I say that all we have really seen is that a simple entity as object can not be dependent on another simple or complex entity which is likewise object in a given number of dependent relations. As between a simple entity and consciousness there are three possibilities. The object may be dependent on consciousness in one of the ways of dependence

enumerated above, it may be dependent in a totally new way, or it may be independent. Only the last possibility speaks for Perry's conclusion, the two others speak against him.

The first possibility just mentioned requires further justification. How, it may be urged, can a simple entity be dependent on consciousness as a whole on a part, since as simple it can not be a whole composed of parts? Again, as relations of implication are found only in propositions or combinations of propositions, how can a simple entity be dependent in this way on consciousness? I grant the justice of this criticism and admit that while we do not know the exact nature of the conscious relation, which is the matter in dispute, we do know some things that it is not, and we may conclude without detriment to our argument that the conscious relation is not one of part-whole or of implication, or of thing-attribute. There still remains to be considered the causal relation.

Perry says "simple entities can not be causally related because they can not be values of variables, since this would belie their simplicity." He is enabled to say this because in defining causation he deliberately declared out of court the theory "that causation is creation *ex nihilo* by an 'activity.'" In justification of this he "appeals to the fact that the 'creation' theory has long since been discredited in science and all other exact discourse." He accordingly defines cause in its narrowest sense to mean "those other values which together with time determine the value of a future complex." It follows from this that a simple entity can not be the effect of a cause "since it can not be the value of a variable."

Once more we agree with him as far as he goes. If in science, *i. e.*, in our dealings with the relation of objects among themselves, the causal theory of "creation" is discredited, then one object which is a simple entity can not be dependent as an effect on another object. But the consciousness-object relation may be a type of causal "creation," as is indeed claimed by the subjective idealists. This is the very matter in dispute, and no amount of discredit on the part of science is relevant for our discussion.

But there is still another way in which Professor Perry proves that an object, even if it be complex, is not dependent on consciousness if we can account for it in another way. It is thus not exclusively determined by its relation to consciousness, and hence not causally dependent on it. Thus "the proposition $c^2 = a^2 + b^2 - 2ab \cdot \cos\gamma$, where γ is the angle of a triangle, c the opposite side, and a, b, the adjacent sides" is not dependent on the cognitive relation, since even if it were determined by it, it is not so exclusively. For we can derive it, as in fact every mathematician does, from the logical and mathematical systems to which it belongs.

Will the reader think me too severe if I charge this argument with a confusion of ideas, or else with a begging of the question? If the idealist opponent maintained that the conscious relation is but another type of object-object relation, the above argument would be correct and relevant. But the whole point of the idealist contention is that while all objective causal determination is longitudinal, the conscious relation is transversal and ultimate and all-inclusive, determining the cause as well as the effect absolutely and not merely relatively. The objective cause determines one out of many possible effects; it explains to us why this particular effect rather than another has taken place; it explains, in other words, the *essence* of the effect, to use Scholastic terminology. The subjective causality of consciousness determines that there shall be cause as well as effect, it determines the *existence* of the cause as well as of the effect. The reason the mathematician has nothing to say about the cognitive relation of his theorems and formulæ is because as mathematician he deliberately ignores this aspect of things, or if he happens also to be a philosopher, he assumes it to be there, though without affecting his results in any manner.

We see now that our original suspicions, as to the success of an empirical method like the above enabling us to solve the problem of independence, were more than justified by an analysis of an actual attempt in that direction. We are thus as far as ever from a solution of the problem.

An obvious stricture on my criticism is that it throughout is based on the assumption that the consciousness-object relation is unique. I am willing to admit this. But not until I have protested that the realist discussion is similarly based on the contrary assumption that the consciousness-object relation is only another type of object-object relation. Assumption for assumption, the former seems to me to have more in its favor whether realism or idealism be the true doctrine.

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REVIEWS AND ABSTRACTS OF LITERATURE

Modern Science and the Illusions of Professor Bergson. HUGH S. R. ELLIOT. With a preface by Sir E. RAY LANKESTER. New York: Longmans, Green, and Company. 1912. Pp. xix + 257.

A discussion of the same set of problems by Elliot and Bergson presents a study in contrasts. Elliot is interested mainly in what we already know; feels that the way to learn more is to continue the established methods; and is not afflicted with doubts as to whether our knowledge and

methods are adequate to reality. Bergson is impressed mainly with the extent and depth of the unknown; by the fact that our concepts and definitions, our language and thought, by no means fully express reality. He tries his hand at expressing some of this unexpressed material, and can do so only by using words quite out of their usual meanings, by employing them sometimes in one sense, sometimes in another, and by adopting figures of speech. He thus becomes obscure, and apparently, if not actually, self-contradictory. Further, he feels that our established method of getting knowledge not only has not grasped the inner nature of reality, but is inadequate to the task of doing so, and must be supplemented or replaced by another. All this is intensely repugnant to the man of set, positive, dogmatic scientific views. Elliot, with his close-to-the-ground turn of mind, sets out to interpret the soaring Bergson in an absolutely literal fashion, giving to all of his words their dictionary meanings. It is not surprising that he can make nothing of Bergson but foolishness,—for it must be admitted that the task is sometimes a difficult one even for him who takes up Bergson with the best of wills to search for truth under all sorts of deceptive disguises.

The relation of Bergson to science, the criticisms which he makes of scientific method, and his proposal to supplement it by the use of intuition, are matters worthy of serious examination; and an exposition of the actual content of Bergson's metaphors is required before the real value of his work can be judged. These are the useful tasks to which Elliot addresses himself. But his extreme literalness, together with his unshakable conviction that nothing good can come out of metaphysics, are bound to prevent his grasping any original ideas of value in Bergson, if such there be.

The author and his prefacer begin by arousing the antagonism of such readers as are not already partisans of their point of view, by violent and sweeping condemnation of all metaphysics. "The attitude maintained throughout this book is that metaphysics is a maze of sesquipedalian verbiage, beyond the reach of science to defend or refute" (p. 6). There is a good brief presentation of the grounds for this attitude, but the scoffing, triumphing tone maintained throughout the book will repel many readers.

After an exposition of Bergson's doctrines, the real burden of the book is reached in the chapter entitled "Reasons for Dissenting from the Philosophy of Professor Bergson." This contains a useful criticism of Bergson's methods of argumentation. Four diverse fallacious methods of drawing conclusions are set forth as common throughout his works. (1) Bergson passes in review the various theories set forth to explain a given matter, rejects each (often on good grounds), then commits the fallacy of assuming that this rejection establishes his own theory. Every careful reader of Bergson will recall with Elliot innumerable cases in which he has been astonished at finding a doctrine treated as established when not a single positive argument for it has been set forth. (2) The second fallacy to which Bergson is prone is the abuse of the argument from analogy—the author choosing carefully such an analogy as will

permit him to draw the desired conclusion. Unless we are to hold that all Bergson's apparent arguments from analogy are mere illustrations, to make clear, without argument, the author's conception of the relation in question, the unprejudiced reader can here hardly fail to agree with Elliot. (3) Bergson makes, without evidence, many positive statements as to matters of fact, that are extremely doubtful or worse; he then uses these as data for deduction. On this count again it appears to the reviewer that a verdict of guilty must be given; one can not avoid the impression that Bergson, having a conclusion in mind, chooses premises to support it. Indeed, we may go farther; one is continually astounded by Bergson's setting forth, after an elaborate argument, a conclusion that does not in the least follow from the facts adduced under the appearance of premises, the argumentation being purely a form. (4) Elliot cites Bergson's "hopeless and irremediable misuse of language; throughout large sections of his work the words are mere forms or sounds without significance behind them" (p. 59). Here we may well be cautious. Bergson appears in many cases to be attempting to express by existing words ideas for which no words are in use. Often, in order to grasp his meaning, it appears almost necessary to have had independent glimpses of the same thought. The reviewer can not claim to fulfill this condition in many cases, but there are perhaps enough such to set the reader on his guard lest some one else might grasp a meaning where he perceives only a waste of words. I shall attempt to show later that Elliot's method of interpretation has led him to miss points of real interest.

The reviewer can but feel that Elliot's arraignment of Bergson's method of argumentation is on the whole just. Doubtless, as Elliot remarks, every possible form of fallacy can be illustrated from his works, Yet it is commonly admitted also that every literary fault can be illustrated from the works of Shakespeare. So far as the work of Bergson is of any value, this lies in its bringing into prominence certain large ideas, inducing men to consider them, as a poet might do. The presentation and argument in Bergson appear to stand logical and scientific analysis to about the same extent that the poems of Ossian might. A reading of "Creative Evolution" in a seminary of which the reviewer was a member convinced all, I believe, that to read the book for profit one should neglect the reasoning and the details, and attempt to seize only the main conceptions; otherwise the latter are lost sight of in the dust of the fallacies, contradictions, and errors of fact that are beaten up.

But since Bergson presents his ideas in logical forms, such a criticism as Elliot makes is well in place. It is in missing some of the large ideas that Elliot fails.

One of Bergson's general ideas, however, Elliot does not miss; the doctrine that instinct or intuition is the best guide to truth in dealing with living things. Upon this Elliot centers his main attack; to the reviewer this appears a valuable part of the book. The argument against intuition as a revelation of truth may be summarized as follows (following Elliot mainly, but not absolutely):

1. Bergson presents no positive argument to show that intuition gives truth; he merely assumes this from his argument that intellect does not —an example of the first form of fallacy above cited. To this might well be added the point that the argument against the intellect, namely, that it serves practical ends, holds equally against instinct; the latter is as much the slave of practical ends as the former. Bergson's argument from practical use, if it has any validity at all (which is certainly not clear), logically leads only to the conclusion that mankind can not know reality, there being not the least ground for making an exception for instinct.

2. In the field of verifiable fact intuition is wrong in ninety-nine cases out of a hundred; no one would seriously think of making it a *test* of truth; it requires verification.

3. Where no test is possible, there is no reason to suppose intuition more reliable.

4. The only ground which could be urged against the conclusion last stated would be that intuition leads to unanimity in all persons that employ it. But this is notoriously the reverse of the fact.

In a chapter on the "Progress of Philosophy," Elliot attacks this question in another way, attempting to show by tracing the history of knowledge that progress has consisted precisely in getting rid of instinct or intuition as a criterion of truth. And in a final chapter he attempts to show that the positive function of philosophy, so far as distinguishable from science, is just to clear from the human mind the burden of ideas arising from the natural instincts. The exposition here is one well worthy of consideration; one with whose general tenor men of science, at least, are likely to agree; it is therefore unfortunate that the intolerant tone pervading it, along with the rest of the book, is likely to prevent its receiving a fair hearing. Certainly a reversion to instinct as a test of truth would be one of the most serious backward steps conceivable. In defense of Bergson it may be urged that he does not (or at least in some passages he does not) propose to substitute intuition where other methods are applicable,[1] but the limitations, which would exclude intuition from perhaps all cases where most votaries of Bergson would be tempted to employ it, seem so incompatible with the great rôle that Bergson otherwise gives it, that a setting forth of the positive dangers of the intuitive method is quite in place.

Elliot further takes up a number of Bergson's positive scientific doctrines, controverting them, often successfully. Where he fails is, we may repeat, in grasping certain leading ideas, which must form the justification of Bergson's work, if there is such justification. We may cite as a characteristic example one of the main ideas in the book on "Creative Evolution." One of the scientific dogmas which Elliot defends is the doctrine of mechanism, asserted as the theoretical possibility of prophesying all that may occur in the future from a knowledge of all that has occurred hitherto. In connection with Huxley's statement of this doctrine, Bergson notes that we can not, as a matter of fact, predict what

[1] Compare "Creative Evolution," transl., page 177.

will happen, and believing as he does that this betrays the essential nature of reality, he remarks "we can not sacrifice experience to the requirements of a system." This touches off a characteristic explosion in Elliot. "He [Bergson] suggests that Huxley has done so, being apparently unaware that no man on earth would have been so little likely to make such a mistake. What experience is sacrificed? What system compelled him to sacrifice it? The habit of using words without any significance is almost a disease with Bergson," etc., etc. (p. 70). Now it is evident that Bergson's remark is a clear and excellent way of expressing the patent fact that the statement as to prophesying all future conditions leaves aside our every-day experience, in deference to our belief in a mechanistic system. Elliot's dogmatic intolerance prevents his seeing this; but worse, it prevents his grasping the underlying idea. To the reviewer there appears to be absolutely nothing in science or scientific method that commits one to this theoretical possibility of prophesying the future from the past. It appears possible to remain scientific and yet to defend a view such as is outlined in the following:

What happens in matter and energy depends on the conditions. The only way to determine what will happen under given conditions is by observation and experiment—proceeding on the basis that under the same conditions the same thing will happen. When new conditions arise, only experience can determine what will happen. Among the conditions to be considered are the configurations of the particles of matter. Under new configurations, it can not be predicted what will happen till this has been observed. Now, in the infinite number of particles of which the universe is composed, it is not impossible that configurations may arise that have never before been realized. It is therefore impossible to predict what will happen under those configurations.[2]

The result would be that future conditions are not even theoretically predictable from the past,[3] yet there would be no breach of determinism; all science would have developed just as it has done; and there would be no obstacle to its future progress. The possibility of such a view, thoroughly compatible with all the results of science as well as with our daily experience, has been brought into greater prominence by Bergson than perhaps ever before; and this appears decidedly worth while. It may be urged, of course, that Bergson adds to this conception some things that appear less compatible with science; for example, indeterminism, result-

[2] Even supposing that we had grounds for predicting what those configurations will be.

[3] As sometimes put, the statement of mechanism as this possibility of prediction involves what might be used as a *petitio principii;* for example, that "with a complete knowledge of the laws of mechanics, physics and chemistry" (Elliot, page 69), the future could be prophesied. If this "complete knowledge" be interpreted to include a knowledge of what will happen under configurations never yet realized, so that there has been no opportunity to obtain this knowledge, the *petitio principii* is evident. So understood the statement merely asserts that if we knew what would happen under any configuration whatever, we would indeed possess this knowledge.

ing from his peculiar doctrine of time as an agent. But it is surely more profitable to select from the suggestions of such a writer those things which appear of value, and reject the rest, than to force ourselves, with Elliot, to condemn the whole as trash.

Similar criticism might be made of Elliot's treatment of other points, notably of all matters bearing upon consciousness. His determination to take Bergson with absolute literalness leads him again and again into triumphant misunderstandings. Thus, Bergson's assertion that in the field of conscious states "there is no essential difference between passing from one state to another and persisting in the same state" is another way of setting forth the same point that Elliot expresses when he calls ideas processes rather than things (p. 142). Yet Bergson's manner of stating the point induces in Elliot the reply "that if we are to believe that, there is simply no limit to the absurdities which might be founded upon it" (p. 62). Examples of this sort of thing might easily be multiplied.

No discussion is attempted of Bergson's interesting criticisms regarding the limitations of scientific treatment, the inherent inadequacy of scientific analysis, and the effect of this upon the mental outlook of men of science; possibly Elliot feels that they are unworthy of consideration. It appears to the reviewer that the points Bergson makes as to the necessary inadequacy (the eternal incompleteness) of scientific analyses are correct and valuable, and that failure to realize them does at times lead men of science to such a narrow dogmatism as that shown by Elliot. But there seems no reason why the man of science *must* fall into this condition, as Bergson appears to assume.

If Elliot has been successful in presenting to us Bergson as a terrible example of the evils of irresponsible speculating, he is perhaps no less so in furnishing us an example of that "certain new scholasticism that has grown up" around science, the mention of which, by Bergson, Elliot (p. 90) so strongly resents.

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Experimental Studies of Mental Defectives. A Critique of the Binet-Simon Tests and a Contribution to the Psychology of Epilepsy. J. E. WALLACE WALLIN. Baltimore: Warwick and York. 1912. Pp. vi + 155.

This is number 7 of the Educational Psychology Monographs edited by Whipple and gives the results of mental and physical tests applied to a colony of 333 epileptics. It throws added light upon our knowledge of the epileptic mind, but the chief interest of the book to the general psychologist and educator will undoubtedly be its accurate and critical study of the Binet-Simon tests. The author shows conclusively that a difference in the method of grading, *i. e.*, of computing the mental age, will give rise to a perceptible difference in the distribution of homogeneous groups of subjects, that there are particular ages at which these differences are very

great, and that therefore this difference may vitiate results for comparative purposes. In the case of 41, or 39 per cent., of the children tesetd a difference of one year or more was found, and an extreme case showed a difference of 3.2 years.

The author has also shown the great lack of uniformity in the difficulty of the tests for the same ages for about half of the ages of the scale —a lack of uniformity, as he says; "amazing from the standpoint of the precision demanded by the standards of scientific research." He makes use of the findings of Goddard, Johnston, and Bobertag on normal children to support his conclusions, and agrees with those authors in holding the tests for ages VI. and IX. to be disproportionately difficult and those for age X. to be too easy. He gives the exact details in regard to each test as to where his findings agree or differ. It is rightly pointed out that what is required is a scale specially adapted to normal American children.

The third chapter gives interesting comparisons between the Binet tests and other physical and mental tests, *e. g.*, dynamometer, ataxiagraph, memory, rate of reading, etc. The result of these interesting comparisons is that the author believes that the scale in spite of its imperfections "affords a practical, easily administered, objective, systematic method of grading defective children and adults . . . which approximately locates the mental station of the individual." At the same time he sounds a note of warning in that it should be considered only as a preliminary and not as a final rating of the individual tested. The reviewer believes that this point can not be too strongly emphasized at the present moment, when boards of education are beginning to provide special schools and are allowing teachers with little or no special training to apply the Binet scale. In only too many cases is the first test looked upon as final, and the child is promptly classified as defective or not, as the case may be. Dr. Wallin's book ought to be in the hands of all such "experts."

The last chapter[1] gives accurate and minute regulations as to how each of the 62 tests ought to be applied.

Scattered throughout the work are 26 tables giving all the figures upon which the author bases his conclusions. These will be extremely valuable for other workers in the field of mental measurement, and, in fact, the whole book is a decided step towards a clearer understanding of the requirements of the long-desired mental measuring rod.

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An Introduction to Psychology. WILHELM WUNDT. Translated from the German edition by RUDOLF PINTNER. New York: The Macmillan Company. 1912. Pp. xi + 198.

The purpose of this little book in the words of the preface is "to introduce the reader to the principal thoughts underlying present-day experimental psychology." With extreme simplicity the veteran Leipziger here resumes the more important facts and principles of the "new" psychology. The simplicity is not of the kind to perplex by its audacious plati-

[1] Reprinted from the *Psychological Clinic,* December 15, 1911.

tudes; the student will not turn aside with a "Yea, but who knoweth not these things?" Definite principles and specific propositions, coordinated into a meaning whole are involved throughout. Yet the book is no "Reflexions-" or "Gedanken-psychologie." The experimental evidence, though of the most elementary nature—being confined to simple sensory, memory, and affective tests—is nevertheless adequate to its purposes.

It must have been with no inconsiderable satisfaction that the author put together these chief results of the "new" psychology, a science so largely of his initiative, owing its prestige to his influence as a teacher and scholar. Since the establishment of the famous laboratory in 1879 there have been over-enthusiastic experimenters who had no principle in mind. And there have been investigators who preferred other forms of inductive evidence. But all have noted with interest the efforts to mediate between experimental observation, with its more or less impressive mathematics, and an analytical philosophy of mind; and much, if not most, of the "new" has become part and parcel of commonly accepted doctrine. This does not imply that the Wundtian psychology does not contain what is characteristic or even debatable. Such, however, can but add to the vital interest of the student, who will here find a very condensed, delightfully written account of mental phenomena from the point of view of their actuality and of the creative resultants of all psychical combinations. History will ascribe honor to Wundt not only for making psychology more scientific, but for making philosophy more acceptable in the twentieth century.

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JOURNALS AND NEW BOOKS

THE AMERICAN JOURNAL OF PSYCHOLOGY. January, 1913. *The Refractory Phase of the Protective-wink Reflex* (pp. 1–8): RAYMOND DODGE. – A further study of the protective-wink reflex in which the records were made by the author's familiar photographic recording device. No complete refractory phase was found, contrary to the reports of Zwardemaker and Laus. There seems rather to be a tendency not to repeat the act. To repeat reactions rapidly would then require constantly increasing stimuli. *The Curve of Forgetting* (pp. 8–33): O. E. FINKENBINDER. – A memory experiment in which nonsense syllables were used. Considerable care was used in the preparation of the material and in the routine of the experiment. The results, in the main, agree with the results of other investigators in this subject. *The Electrical Supply, and Certain New Additions to the Laboratory Equipment, in the Stanford University Psychological Laboratory* (pp. 33–35): LILLIEN J. MARTIN. –A note on the additions in color-mixing apparatus. *Practice and the Work Curve* (pp. 35–52): FREDERIC LYMAN WELLS. – A discussion of the work and fatigue curve experiments followed by an experiment on the effect of practise on

endurance. Consistent results on endurance were not obtained. Improvement shows itself in various individual forms. *Paramnesia in Daily Life* (pp. 52–66): THEODATE L. SMITH. – A study of about forty-five cases in which enough facts were known to permit a psychological analysis. Paramnesia seems to result from partial amnesias that cause distorted memory images. *A Comparison between Experimental Data and Clinical Results in Manic-depressive Insanity* (pp. 66–99): EDWARD K. STRONG, JR. – A comparison of the clinical descriptions of eleven patients with the results of five tests given to each. *The Use of the Term "Function" in English Text-books of Psychology* (pp. 99–124): CHRISTIAN A. RUCHNICH. –The term "function" was found used with several different meanings in the various books and often in the same book. Text-books by Angell, Baldwin, Calkins, Dunlap, James, Judd, Ladd and Woodworth, McDougall, Myers, Pillsbury, Read, Stout, Thorndike, Titchener, and Yerkes, had been examined. *Discussions: Professor Martin on the Perky Experiments* (pp. 124–132): E. B. TITCHENER. – A criticism of the work done by L. J. Martin in her repetition of the Perky experiments, as noted in her "Die Projektionsmethode und die Lokalisation visueller und anderer Vorstellungsbilder," *Zeits. f. Psych.*, Vol. LXI., 1912, pages 321 ff. *Book Reviews:* S. de Sanctis and others, *Contributo Psicologici del Laboratorio di Psicologia Sperimentale della R. Universita di Roma:* THEODATE L. SMITH. A. T. Poffenberger, Jr., *Reaction Time to Retinal Stimulation, with special reference to the time lost in conduction through nerve centers:* SAMUEL W. FERNBERGER. Arthur Jerome Culler, *Influence and Adaptability:* SAMUEL W. FERNBERGER. John Welhoff Todd, *Reaction to Multiple Stimuli:* SAMUEL W. FERNBERGER. Branislav Petronievics, *Principien der Metaphysik:* RADOSLAV A. TSANOFF. August Gallinger, *Das Problem der objektiven Moglichkeit. Eine Bedeutungsanalyse:* RADOSLAV A. TSANOFF. G. E. Partridge, *The Genetic Philosophy of Education. Book Notes:* W. F. Barrett, *Psychical Research. Proceedings of the American Society for Psychical Research.* W. H. B. Stoddart, *Mind and its Disorders.* Archibald Church and Frederick Peterson, *Nervous and Mental Diseases.* Maurice Craig, *Psychological Medicine.* Wilhelm Wundt, *Elements der Volkerpsychologie.* Hugo Münsterberg, *Psychologie und Wirtschaftsleben.* T. Loveday and J. A. Green, *An Introduction to Psychology.* Theodor Elsenhans, *Lehrbuch der Psychologie.* William McDougall, *Psychology, the Study of Behavior.* Lillien J. Martin, *Die Projektionsmethode und die Lokalisation visueller und anderer Vorstellungsbilder.* Th. Ziehen, *Ueber die allgemeinen Beziehungen zwischen Gehirn und Seelenleben.* William Stern and Otto Lipman, *Zeitschrift für augewandte Psychologie und psychologische Samuelforschung.* John Aulde, *The Clinic Problem in Nutrition.* Georges Rouma, *Le langage graphique de l'enfant.* George Stuart Fullerton, *The World We Live In.* Georges Bohn, *Die Entstehung des Denkvermögens.* Edgar James Swift, *Youth and the Race.* Charles A. Ellwood, *Sociology and its Psychological Aspects.* James Quayle Dealy, *The Family and its Sociological Aspects.* Ernest Jones, translated by E. H. Sachs, *Der Alptraum.* Karl

Furtmuller, *Psychoanalysis und Ethik.* R. Hennig, *Die Entwickelung des Naturgefuhls.* P. Saintyves, *La simulation du merveilleux.* H. L. Hollingworth, *The Influence of Caffein on Mental and Motor Efficiency.* J. H. Todd, *Reaction to Multiple Stimuli.* U. Josefovici, *Die psychiche Vererbung.* Aster und Anderen, *Munchener philosophiche Abhandlungen.* Benj. Rand, *The Classical Psychologists.*

RIVISTA DI FILOSOFIA NEO-SCOLASTICA. December, 1912. *Socialismo e filosofia* (pp. 705–722): P. ROTTA. – Socialism attempts to return to philosophy. But it can not be made to agree with the systems with which it is apparently connected (positivism, Bergsonism, Fichte's philosophy). *La teoria dell' anima e la generazione delle forme secondo Pietro d' Albano* (pp. 723–727): B. NARDI. – Pietro d'Albano is not an Averroist, as has often been believed. His doctrine on the two points in question agrees with the doctrine of St. Thomas. *Il Platonismo in Francia nel secolo XIX* (pp. 738–755): C. HUIT. – Platonism found its most illustrious exponents and defenders among the disciples of Victor Cousin. *Una lettera inedita di Vincenzo Gioberti* (pp. 756–758): A. DYROFF. – A letter of Gioberti to the German philosopher Clemens; Paris, October 4, 1847. *A proposito della dimostrazione tomistica dell' esistenza di Dio* (pp. 758–769): A. AUDIN. – The five proofs of God's existence given by St. Thomas are not independent of one another. *Analisi d'opere.* B. Varisco, *Conosci te stesso:* G. TREDICI. T. Lipps, *Psychologische Untersuchungen:* F. OLGIATI. M. Barillari, *Diritto e filosofia:* R. FUSARI. F. Brentano, *Aristoteles und seine Weltanschauung:* B. NARDI. B. Soto, *Petri Compostellani de Consolatione rationis libri duo:* B. NARDI. V. Fazio-Allmeyer. *Galileo Galilei:* F. OLGIATI. A. Poulain, *Delle grazie di orazione. Sommario ideologico delle opere e delle riviste di filosofia.*

Andler, Ch., and others. La Philosophie Allemande de XIX Siecle. Paris: Félix Alcan. 1912.

Calderone, Innocenzo. La Rincarnazione. Milan: Casa Editrice "Veritas." 1913. Pp. 351. 5 L.

Campbell, Percy A. The Game of Mind. New York: Baker and Taylor Company. 1913. Pp. 80. $0.75.

Hackforth, R. The Authorship of the Platonic Epistles. Manchester: University Press. 1913. Pp. 203. $2.00.

Haldane, Elizabeth S., and Ross, G. R. T. The Philosophical Works of Descartes. Vols. I. and II. Cambridge. University Press. 1912. Pp. viii + 280. 10s. 6d.

Hirn, Yrjö. The Sacred Shrine. London: The Macmillan Company. 1912. Pp. xv + 574.

Luquet, G. H. Les Dessins d'un Enfant. Paris: Librairie Félix Alcan. 1913. Pp. xxvi + 262. 7.50 Fr.

NOTES AND NEWS

THE following is a translation of a notice which has recently appeared in several European philosophical journals:

"The undersigned teachers of philosophy in the higher institutions of Germany, Austria, and Switzerland take occasion to protest against the appointment of representatives of experimental psychology to chairs in philosophy. The scope of experimental psychology has so extended that it has long been recognized as an independent study requiring all the energy of specialists. Not only have chairs been created for psychologists, but professorships of philosophy have been repeatedly filled with men whose activity is devoted chiefly or exclusively to the experimental study of the mind. This is comprehensible when we remember the earlier stages of these sciences. It was formerly inevitable that both studies should be represented by the same scholar, but with the progressive development of experimental psychology, conditions have resulted which are unfortunate for all concerned. Because of the withdrawal of chairs particularly devoted to it, serious damage results to philosophy, in which the interest of our academic youth is steadily increasing. This is the more disturbing since the scope of philosophy is becoming more extensive, and since just now when there is so much philosophical agitation, the students should not be denied opportunity to become scientifically acquainted through the academic teachers with the general questions concerning life and the world.

"In consequence of all this, the undersigned regard it as their duty to point out to philosophical faculties and also to the departments of education this increasing disadvantage to the study of philosophy. For the common interests of both sciences careful thought should be taken that the status of philosophy in the life of the higher institutions of learning should remain assured. Therefore, experimental psychology should in the future be promoted through the establishment of its own chairs, and wherever the old philosophical professorships are held by representatives of experimental psychology, care should be taken to found new chairs of philosophy."

The above protest is signed by one hundred and seven of the leading professors and teachers of philosophy in Germany, Austria, and Switzerland.

AT the meeting of the Aristotelian Society on May 5, Mr. R. P. Hardie was elected a member. Miss L. S. Stebbing read a paper on "The Notion of Truth in Bergson's Theory of Knowledge." Bergson's conception of truth is closely connected with his theory of intuition. This theory he has worked out from two different standpoints—epistemological and evolutionary. The relation of intuition to instinct and to intellect is not defined; its essential nature is described as "sympathy," sometimes intellectual, at others instinctive, as opposed to intellect. But intellect is condemned because its function is the satisfaction of practical needs. The Bergsonian notion of truth is developed by M. Le Roy and M. Wilbois. Dr. Schiller claims that the theory is pragmatic. But this can not be

maintained, since the Bergsonian intuitionist holds that knowledge of the real must be gained by turning our backs on questions of utility. Truth is action or life, and can be known only by living the truth, so that knower and known are one. There seems to be here a resemblance to Aristotle's doctrine of νοῦς ποιητικός rather than to any form of pragmatism. Intuition is the sole philosophic faculty, because by means of it the knower can plunge into the flux of reality, and know it from within by being one with it. The difficulty of this theory is that the intuition must be incommunicable, hence leads to scepticism. Further, truth is identified with reality; but this seems fatal to any theory of truth. Only by admitting the non-existential character of truth and its dependence upon the distinction of knower and known can it be maintained that truth is complete, even though it be *about another*. The failure to recognize this is responsible for the breakdown of Bergson's theory of truth.—*Athenæum*.

An invitation has been extended to those interested in philosophy to attend the Fifth International Congress of Philosophy which will be held in London from August 31 to September 7, 1915. It is important that those who will participate actively in the Congress shall indicate their willingness and send to the executive committee the subjects of their papers, together with the sections for which the papers are destined, as soon as possible. The work of the Congress will be, as in former years, divided into sections proposed as follows: (1) General Philosophy and Metaphysics; (2) Logic and Theory of Knowledge; (3) History of Philosophy; (4) Psychology; (5) Esthetics; (6) Moral Philosophy; (7) Political Philosophy and Philosophy of Law; (8) Philosophy of Religion. Every member of the Congress, whether attending as a delegate or by invitation or in a personal capacity subscribes the sum of £1. All communications should be directed to the Secretary of the Congress, H. Wildon Carr, Esq., D.Litt., More's Garden, Chelsea, London, S. W. Payments should be made to Dr. F. C. S. Schiller, Corpus Christi College, Oxford, England.

W. C. Ruediger, professor of educational psychology, and acting dean at the George Washington University since the death of Dean Hough last September, has been appointed dean.

Professor Ernest C. Moore, head of the department of education at Yale University, has received an offer to become professor of education at Harvard University.

The Tenth Annual Conference of Experimental Psychologists was held in the psychological laboratory of Fisk Hall, Wesleyan University, April 10 to 12.

Professor Oswald Külpe has accepted the call of the University of Munich, and will occupy the chair of philosophy formerly held by Th. Lipps.

On May 6, 7, and 9 Mrs. Christine Ladd-Franklin gave at Columbia University three lectures on Color-Vision.